

RO/RO RAMP TO PLATFORM INTERFACE

JLOTS & LOGISTICS FROM THE SEA
R&D SYMPOSIUM
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RO/RO Ramp to Platform Interface

- Current Operational Issues
- Program Objectives
- Benefits
- Concepts
- Project Plan & Status
- NPS Evaluation
- Questions



RO/RO Ramp to Platform Interface



Ship ramps designed for calm water pier operations, not for dynamic motions.

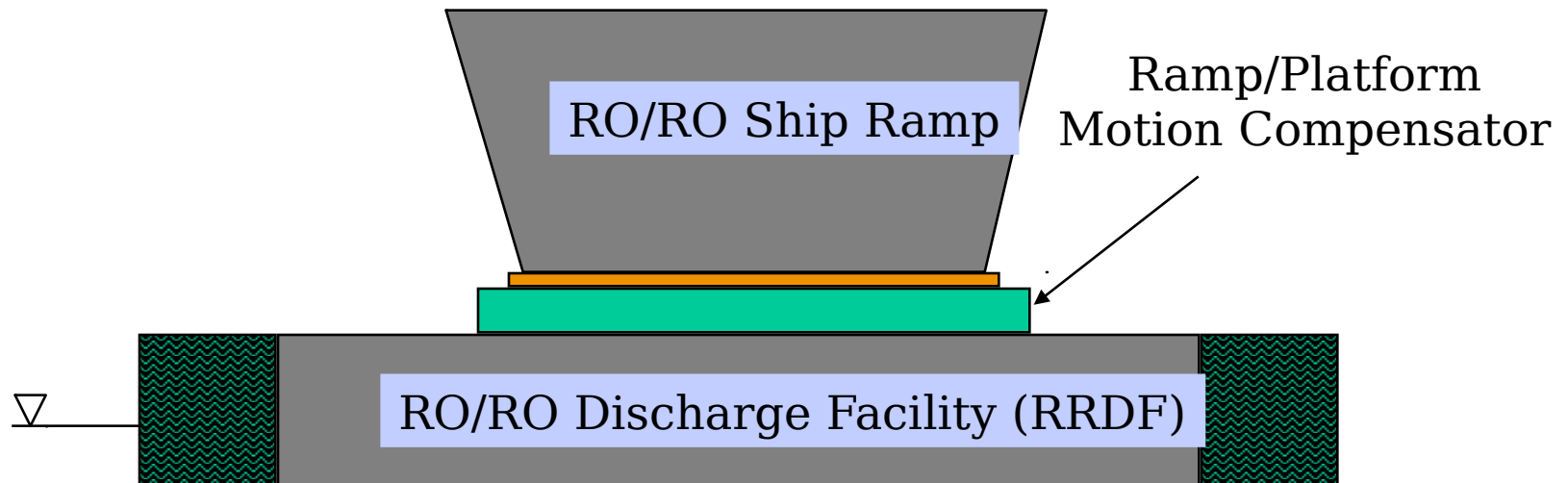
Existing and planned modular platforms do not compensate for the relative motion between the ramp and RRDF.

Ramp stresses exceed design levels.

RO/RO Ramp to Platform Interface

Objective

Develop a SS3 interface capability between ramps of existing RO/RO ships and existing and future causeway platforms



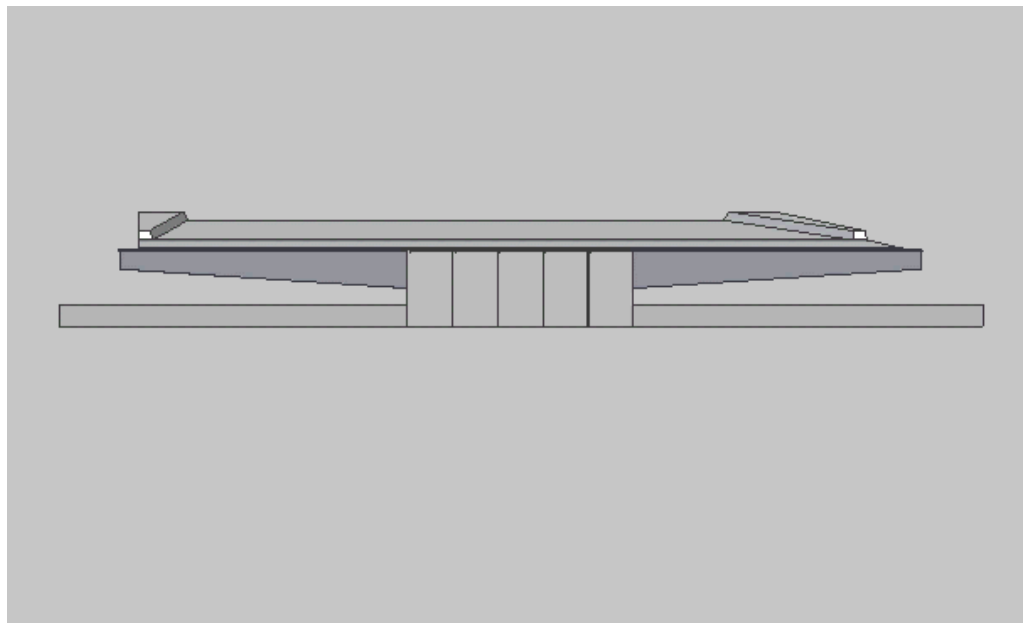
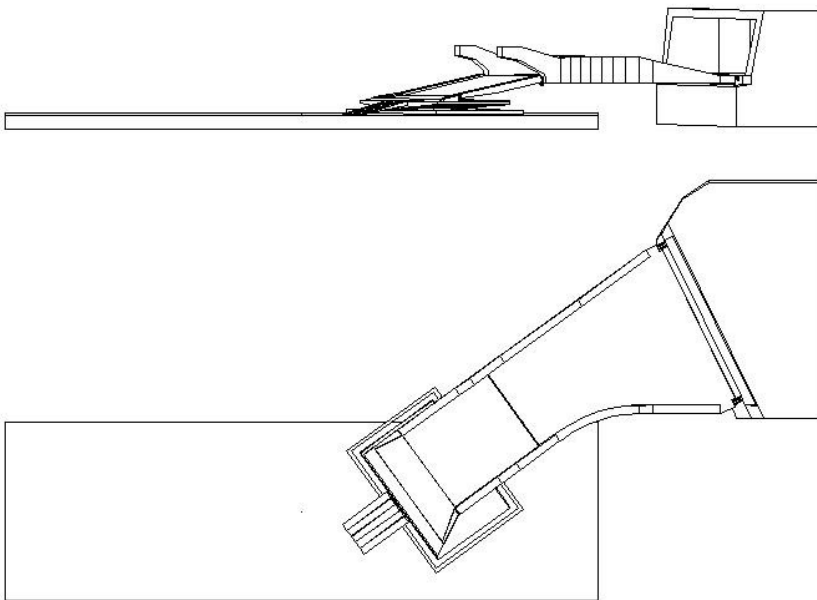
RO/RO Ramp to Platform Interface

Benefits

- Ability to conduct RO/RO operations through Sea State 3
Increased productivity & safety
- Reduce relative motion between ramp and RRDF
- Prevent ramp stress levels from exceeding design limits
- Avoid costly RO/RO ship ramp modifications
- Enable operations with MPF, RRF, commercial and foreign RO/RO vessels

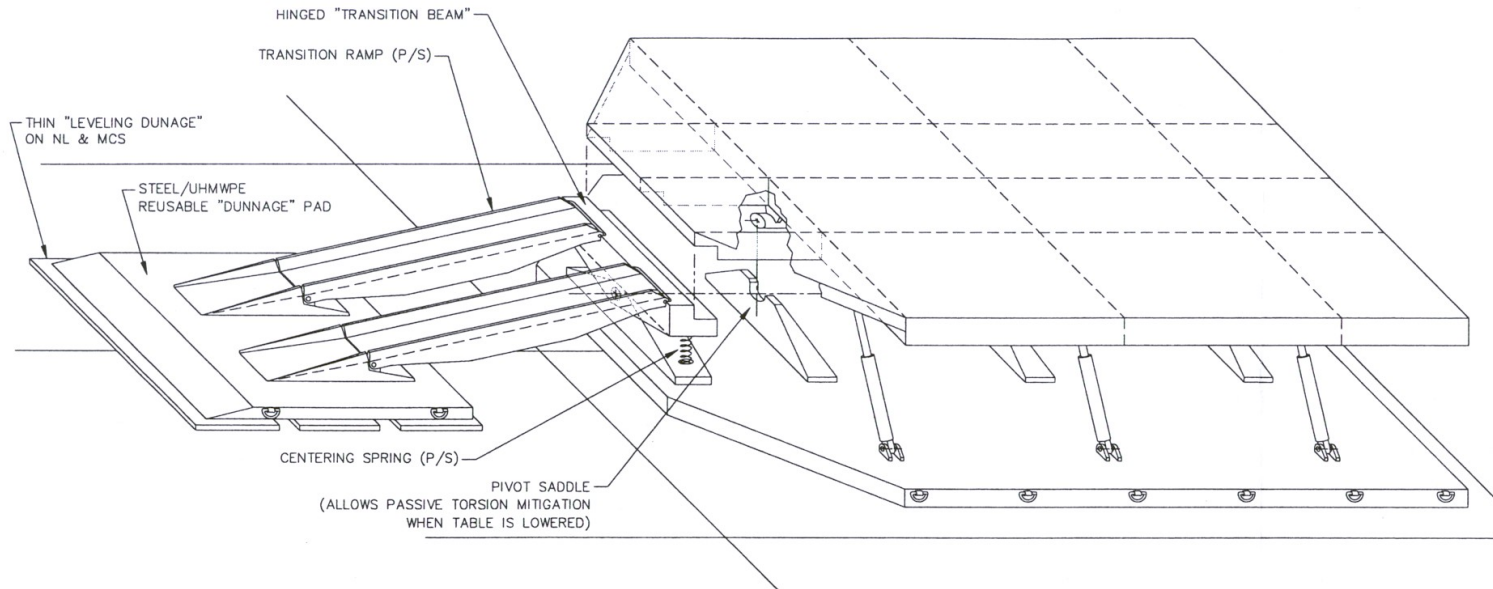
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Ramp/Platform Motion Compensator Concept 1



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Ramp/Platform Motion Compensator Concept 2



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FY01:

Re-Issued BAA

Completed 1st round evaluation

2 concepts selected for further development and evaluation

FY02:

Preliminary designs for simulation completed

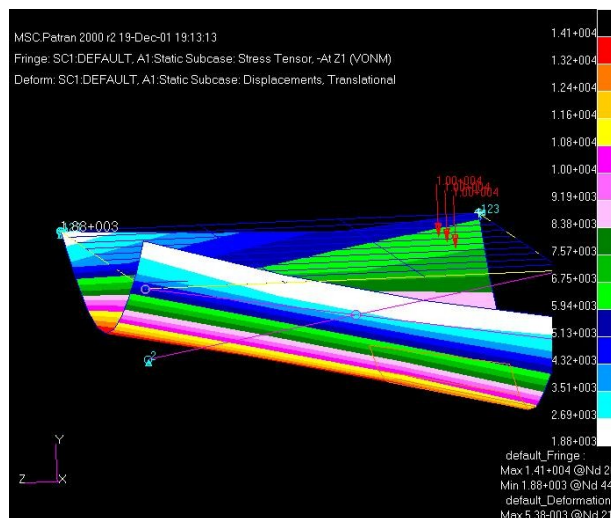
Evaluation of proposed concepts by Naval Postgraduate School

Final down select and continued development.

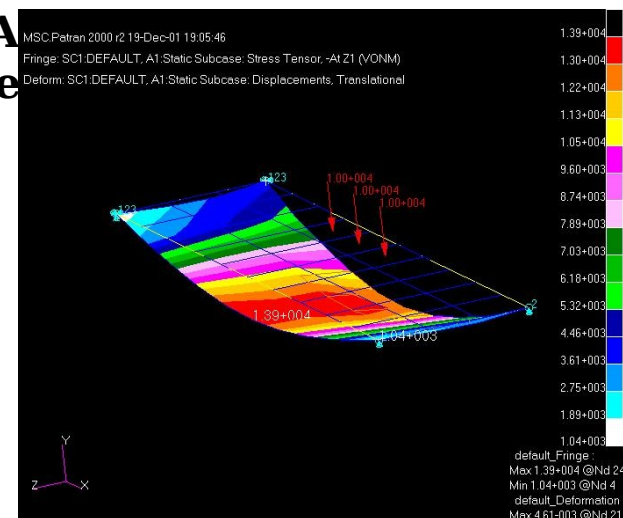
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Naval Postgraduate School Concept Evaluation

- Two ramps (Cape T, LMSR) in stern ramp configuration.
- SS3 with 5 ft significant wave height (Pierson Moscowitz spectrum).
- Beam and Quartering seas (45°, 90° and 135° headings).



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Information and updates can be
obtained at:

<http://www.dt.navy.mil/code282/rororamp.html>

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